GOVERNMENT OF INDIA
AGRICULTURE
LOK SABHA

UNSTARRED QUESTION NO:3590
ANSWERED ON:07.04.2003
PROJECT ON FARM MECHANIZATION
CHANDRA PRATAP SINGH;HARIBHAU MAHALE

Will the Minister of AGRICULTURE be pleased to state:

(a) whether the Indian Agricultural Statistics Research Institute (IASRI) is currently running any project on long-term strategy for farm mechanization;

(b) if so, the details of the project alongwith title, name of PI, funding agency, cost of the project, amount charged by IASRI, date of launch, date of completion as per project proposal, practical utility and actual/expected date of completion;

(c) whether the project has been delayed;

(d) if so, the reasons therefor;

(e) whether above PI had previous experience of project on energy utilisation; and

(f) if so, the details thereof?

Answer

THE MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE (SHRI HUKUMDEO NARAYAN YADAV)

(a) Yes, Sir.

(b) Details are enclosed in the Annexure.

(c) No, Sir.

(d) Not applicable, Sir.

(e) & (f) Dr. K.K. Tyagi, Principal Scientist has previous experience of project on energy utilisation.He is the Project Leader of the Institute research project entitled `Pilot Sample Survey for Estimating the Energy Utilisation for Different levels of Adoption of Modern Technology in Agriculture`. The objective of the project was to develop suitable sampling methodology for estimating the energy utilisation for different levels of adoption of modern technology in terms of labour and inputs like irrigation, fertilizers etc. The field data collection work was undertaken in Meerut district in Uttar Pradesh State.The sampling design adopted was stratified multi-stage random sampling with tehsils as the strata, and villages and cultivators as the primary and secondary stage sampling units respectively under the Agronomic and Agro-economic Enquiry. For Yield Estimation Surveys, villages, cultivators, fields and plots of 55 metres constituted the primary, secondary, tertiary and fourth stage-sampling units.

ANNEXURE

Title : Study Relating to Formulating Long-Term Mechanisation Strategy for each Agro-Climatic Zone / State

Name of the PI : Dr. K.K. Tyagi, Principal Scientist

Funding Agency : Department of Agriculture & Cooperation (DOAC), Ministry of Agriculture, GOI.

Cost of the project : Rs. 1 crore 30 lakh (as sanctioned)

Amount charged by IASRI : As Institutional Charges: Rs. 2.70 lakh.

Date of launch/start : 01.07.2000

Date of completion as per project proposal : Three years w.e.f. date of start.

Practical utility : Policy framed by the GOI on the basis of this project report may be of use for the all round development of agriculture in each State/ Agro Climatic Zone of the country.

Actual/expected date of completion : 30.06.2003.

ABOUT THE PROJECT

The programme envisages the conduct of an in-depth study, at micro-level, of the socio-economic, agro-climatic, agronomic, infrastructural and other relevant factors prevailing in the different agro-climatic zones of the country, which have a bearing on the spread of agricultural mechanisation, agricultural productivity therein; and formulation of appropriate long-term farm mechanisation strategies for the respective zones. It is likely that for a number of Zones / States, a single set of strategy / programme may not be uniformly conducive to the spread of farm mechanisation and all-round and sustainable agricultural development there. As such, appropriate packages of agricultural mechanisation strategies and programmes for the different Zones / States need to be formulated according to the present status, potential and future needs of agricultural mechanisation there.

SAMPLING DESIGN

The study is being conducted for each Agro-climatic Zone / State covering about 20% of the districts representing a mix of developed, developing and least developed pockets. The basic purpose is to have complete insight of the situation and future needs in the direction of achieving full mechanization in a suitable time frame.

The sampling design adopted is Stratified Multi-stage Random Sampling. At present, the total number of districts in India is about 585, out of which a sample of 120 districts has been selected randomly with due consideration to mechanisation index of different districts within strata (State or group of States), following proportional allocation. From each selected district, a random sample of 40 villages has also been selected. Accordingly, the total number of selected villages is 4,800. Keeping in view the level and adoption of mechanisation (holding-size wise), out of each selected village, a sample of 10 households has been selected. Hence, the total number of randomly selected Households is 48,000. The reference year is the agricultural year 2000-2001.

OBJECTIVES OF THE PROJECT

i) To study the soil types, land topography.

ii) To study the socio-economic conditions (financial status) of the farmers and farm labourers and assess their capabilities for acquiring and adopting the needed agricultural equipment /machinery.

iii) To study the present status, ultimate potential, the gaps, highlighting critical ones; for equipment used in various agricultural operations starting right from tillage to the post-harvest operations.

iv) To study the types and utility of various agricultural equipment, both conventional and improved ones, presently in use and those needed in future, for different crops / cropping systems in the Zones.

v) To study the impact of farm mechanisation on employment of labour.

vi) To study the cropping pattern, both agricultural and horticultural, in the Zones, yields in relation to the national average, and their growth potential.

vii) To study and assess the use of farm power per hectare, ultimate requirement, ways and means to fulfil the gaps for various farm operations.

viii) To study the infrastructural facilities for the manufacture, marketing, after sale service / repairs availability etc. of agricultural equipment.

ix) To study and assess the adequacy and the requirement of infrastructure at the central and state levels, for planning, promotion, execution and extension of the various plan programmes on agricultural mechanization.

x) To identify new / improved farm equipment that may be needed by the farmers during next 20 years i.e. by the year 2020, for carrying out different farm operations.

xi) To formulate strategies and programmes that may be required for mechanisation of agriculture during the period 2001-2005,

2005-2010, 2010-2015, 2015-20.